1600

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/651,150B

Input Set : D:\seqlist.txt
Output Set: N:\CRF4\11082002\I651150B.raw

<110> APPLICANT: Payan, Donald
<120> TITLE OF INVENTION: TOSO AS A TARGET FOR DRUG SCREENING
<130> FILE REFERENCE: RIGL-503CON
<140> CURRENT APPLICATION NUMBER: US 09/651,150B
<141> CURRENT FILING DATE: 2000-08-30
<150> PRIOR APPLICATION NUMBER: US 09/050,861
<151> PRIOR FILING DATE: 1998-03-30
<160> NUMBER OF SEQ ID NOS: 38
<170> SOFTWARE: Patentin version 3.1
<210> SEQ ID NO: 1
<211> LENGTH: 1911
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 1

RAW SEQUENCE LISTING DATE: [illegible]
PATENT APPLICATION: US/09/651,150B TIME: [illegible]

Input Set : D:\seqlist.txt
Output Set: N:\CRF4\11082002\I651150B.raw

```
106 attcct aaa acaccttgc cctaatccaa atgttagcac ttgctaatga acatctactt    1800
108 [illegible]                                                          1860
110 caaaatatgc atatatatcc ataaattctc tttactctgt ctccatcctt t            1911
113 <210> SEQ ID NO: 2
115 <211> LENGTH: [illegible]
117 <212> TYPE: PRT
119 <213> ORGANISM: Homo sapiens
123 <400> SEQUENCE: 2
125 Met Asp Arg Trp Leu Trp Pro Leu Tyr Phe Leu Pro Val Ser Gly Ala
126 1               5                   10                  15
129 Leu Arg Ile Leu Pro Glu Val Lys Val Glu Gly Glu Leu Gly Gly Ser
130             20                  25                  30
133 Val Thr Ile Lys Cys Pro Leu Pro Glu Met His Val Arg Ile Tyr Leu
134         35                  40                  45
137 Cys Arg Glu Met Ala Gly Ser Gly Thr Cys Gly Thr Val Val Ser Thr
138     50                  55                  60
141 Thr Asn Phe Ile Lys Ala Glu Tyr Lys Gly Arg Val Thr Leu Lys Gln
142 65                  70                  75                  80
145 Tyr Pro Arg Lys Asn Leu Phe Leu Val Glu Val Thr Gln Leu Thr Glu
146                 85                  90                  95
149 Ser Asp Ser Gly Val Tyr Ala Cys Gly Ala Gly Met Asn Thr Asp Arg
150             100                 105                 110
153 Gly Lys Thr Gln Lys Val Thr Leu Asn Val His Ser Glu Tyr Glu Pro
154         115                 120                 125
157 Ser Trp Glu Glu Gln Pro Met Pro Glu Thr Pro Lys Trp Phe His Leu
158     130                 135                 140
161 Pro Tyr Leu Phe Gln Met Pro Ala Tyr Ala Ser Ser Ser Lys Phe Val
162 145                 150                 155                 160
165 Thr Arg Val Thr Thr Pro Ala Gln Arg Gly Lys Val Pro Pro Val His
166                 165                 170                 175
169 His Ser Ser Pro Thr Thr Gln Ile Thr His Arg Pro Arg Val Ser Arg
170             180                 185                 190
173 Ala Ser Ser Val Ala Gly Asp Lys Pro Arg Thr Phe Leu Pro Ser Thr
174         195                 200                 205
177 Thr Ala Ser Lys Ile Ser Ala Leu Glu Gly Leu Leu Lys Pro Gln Thr
178     210                 215                 220
181 Pro Ser Tyr Asn His His Thr Arg Leu His Arg Gln Arg Ala Leu Asp
182 225                 230                 235                 240
185 Tyr Gly Ser Gln Ser Gly Arg Glu Gly Gln Gly Phe His Ile Leu Ile
186                 245                 250                 255
189 Pro Thr Ile Leu Gly Leu Phe Leu Leu Ala Leu Leu Gly Leu Val Val
190             260                 265                 270
193 Lys Arg Ala Val Glu Arg Arg Lys Ala Leu Ser Arg Arg Ala Arg Arg
194         275                 280                 285
197 Leu Ala Val Arg Met Arg Ala Leu Glu Ser Ser Gln Arg Pro Arg Gly
198     290                 295                 300
201 Ser Pro Arg Pro Arg Ser Gln Asn Asn Ile Tyr Ser Ala Cys Pro Arg
202 305                 310                 315                 320
205 Arg Ala Arg Gly Ala Asp Ala Ala Gly Thr Gly Glu Ala Pro Val Pro
```

RAW SEQUENCE LISTING DATE: 11/8/2002
PATENT APPLICATION: US/09/651,150B TIME: 21:51:04

Input Set : D:\seqlist.txt
Output Set: N:\CRF4\11082002\I651150B.raw

206 325 330 345
209 Gly Pro Gly Ala Pro Leu Pro Pro Ala Pro Leu Gln Val Ser Gly Ser
210 340 345 350
213 Pro Trp Leu His Ala Pro Ser Leu Lys Thr Ser Cys Glu Tyr Val Ser
214 355 360 365
217 Leu Tyr His Gln Pro Ala Ala Met Met Glu Asp Ser Asp Ser Asp Asp
218 370 375 380
221 Tyr Ile Asn Val Pro Ala
222 385 390
225 <210> SEQ ID NO: 3
226 <211> LENGTH: 75
227 <212> TYPE: PRT
228 <213> ORGANISM: Homo sapiens
230 <400> SEQUENCE: 3
233 Val Thr Ile Lys Cys Pro Leu Pro Glu Met His Val Arg Ile Tyr Leu
234 1 5 10 15
237 Cys Arg Glu Met Ala Gly Ser Gly Thr Cys Gly Thr Val Val Ser Thr
238 20 25 30
241 Thr Asn Phe Leu Lys Ala Glu Trp Lys Gly Arg Val Thr Leu Lys Gln
242 35 40 45
245 Tyr Pro Arg Lys Asn Leu Phe Leu Val Glu Val Thr Gln Leu Thr Glu
246 50 55 60
249 Ser Asp Ser Gly Val Tyr Ala Cys Gly
250 65 70
253 <210> SEQ ID NO: 4
254 <211> LENGTH: 79
256 <212> TYPE: PRT
257 <213> ORGANISM: Homo sapiens
259 <400> SEQUENCE: 4
262 Leu Ser Leu Thr Cys Thr Val Ser Gly Ser Thr Phe Ser Asn Asp Tyr
263 1 5 10 15
266 Tyr Thr Trp Val Arg Gln Pro Pro Gly Arg Gly Leu Glu Trp Ile Gly
267 20 25 30
270 Tyr Val Phe Tyr His Gly Thr Ser Asp Asp Thr Thr Pro Leu Arg Ser
271 35 40 45
274 Arg Val Thr Met Leu Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Arg
275 50 55 60
278 Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
279 65 70 75
282 <210> SEQ ID NO: 5
283 <211> LENGTH: 75
285 <212> TYPE: PRT
286 <213> ORGANISM: Homo sapiens
288 <400> SEQUENCE: 5
291 Val Thr Leu Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr Ser Asn
292 1 5 10 15
295 Tyr Ala Asn Trp Val Gln Gln Lys Pro Asp His Leu Phe Thr Gly Ile
296 20 25 30
299 Gly Gly Thr Asn Asn Arg Ala Pro Gly Val Pro Ala Arg Phe Ser Gly

RAW SEQUENCE LISTING DATE: 11/ 8/2002
PATENT APPLICATION: **US/09/651,150B** TIME: 13:58:04

Input Set : **D:\seqlist.txt**
Output Set: **N:\CRF4\11082002\I651150B.raw**

```
310          5                  40                  45
313 Ser Leu Ile Gly Asn Lys Ala Ala Leu Thr Ile Thr Gly Ala Gln Thr
314      10                  55                  60
317 Glu Asp Glu Ala Ile Tyr Phe Cys Ala
318 65                  70
321 <210> SEQ ID NO: 6
324 <211> LENGTH: 75
327 <212> TYPE: PRT
330 <213> ORGANISM: Homo sapiens
333 <400> SEQUENCE: 6
336 Thr Ser Leu Asn Cys Thr Phe Ser Asp Ser Ala Ser Gln Tyr Phe Trp
339 1               5                  10                  15
342 Trp Tyr Arg Gln His Ser Gly Lys Ala Pro Lys Ala Leu Met Ser Ile
345             20                  25                  30
348 Phe Ser Asn Gly Glu Lys Glu Glu Gly Arg Phe Thr Ile His Leu Asn
351         35                  40                  45
354 Lys Ala Ser Leu His Phe Ser Leu His Ile Arg Asp Ser Gln Pro Ser
357     50                  55                  60
360 Asp Ser Ala Leu Tyr Leu Cys Ala
363 65                  70
366 <210> SEQ ID NO: 7
369 <211> LENGTH: 75
372 <212> TYPE: PRT
375 <213> ORGANISM: Homo sapiens
378 <400> SEQUENCE: 7
381 Val Thr Leu Arg Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp
384 1               5                  10                  15
387 Tyr Arg Gln Thr Met Met Arg Gly Leu Glu Leu Leu Ile Tyr Phe Asn
390             20                  25                  30
393 Asn Asn Val Pro Ile Asp Asp Ser Gly Met Pro Glu Asp Arg Phe Ser
396         35                  40                  45
399 Ala Lys Met Pro Asn Ala Ser Phe Ser Thr Leu Lys Ile Gln Pro Ser
402     50                  55                  60
405 Glu Pro Arg Asp Ser Ala Val Tyr Phe Cys Ala
408 65                  70                  75
411 <210> SEQ ID NO: 8
414 <211> LENGTH: 74
417 <212> TYPE: PRT
420 <213> ORGANISM: Homo sapiens
423 <400> SEQUENCE: 8
426 Val Glu Leu Thr Cys Thr Ala Ser Gln Lys Lys Ser Ile Gln Phe His
429 1               5                  10                  15
432 Trp Lys Asn Ser Asn Gln Ile Lys Ile Leu Gly Asn Gln Gly Ser Phe
435             20                  25                  30
438 Leu Thr Lys Gly Pro Ser Lys Leu Asn Asp Arg Ala Asp Ser Arg Arg
441         35                  40                  45
444 Ser Leu Trp Asp Gln Gly Asn Phe Pro Leu Ile Ile Lys Asn Leu Lys
447     50                  55                  60
450 Ile Glu Asp Ser Asp Thr Tyr Ile Cys Glu
453 65                  70
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/651,150B

Input Set : D:\seqlist.txt
Output Set: N:\CRF4\11082002\I651150B.raw

414 6
417 <210> SEQ ID NO: 9
419 <211> LENGTH: 84
421 <212> TYPE: PRT
423 <213> ORGANISM: Homo sapiens
425 <400> SEQUENCE: 9

427	Ala	Lys	Met	Ser	Cys	Glu	Ala	Lys	Thr	Phe	Pro	Lys	Gly	Thr	Thr	Ile
429	1				5					10					15	
431	Tyr	Trp	Leu	Arg	Glu	Leu	Gln	Asp	Ser	Asn	Lys	Asn	Lys	His	Phe	Glu
433				20					25					30		
435	Phe	Leu	Ala	Ser	Arg	Thr	Ser	Thr	Lys	Gly	Ile	Lys	Tyr	Gly	Glu	Arg
437			35					40					45			
439	Val	Lys	Lys	Asn	Met	Thr	Leu	Ser	Phe	Asn	Ser	Thr	Leu	Pro	Phe	Leu
441		50					55					60				
443	Lys	Ile	Met	Asp	Val	Lys	Pro	Glu	Asp	Ser	Gly	Ile	Tyr	Phe	Cys	Ala
445	65					70					75					80

447 <210> SEQ ID NO: 10
449 <211> LENGTH: 76
451 <212> TYPE: PRT
453 <213> ORGANISM: Homo sapiens
455 <400> SEQUENCE: 10

461	Val	Thr	Ile	Thr	Cys	Pro	Phe	Thr	Tyr	Ala	Thr	Arg	Gln	Leu	Lys	Lys
463	1				5					10					15	
465	Ser	Phe	Tyr	Lys	Val	Glu	Asp	Gly	Glu	Leu	Val	Leu	Ile	Ile	Asp	Ser
467				20					25					30		
469	Ser	Ser	Lys	Glu	Ala	Lys	Asp	Pro	Arg	Tyr	Lys	Gly	Arg	Ile	Thr	Leu
471			35					40					45			
473	Gln	Ile	Gln	Ser	Thr	Thr	Ala	Lys	Glu	Phe	Thr	Val	Thr	Leu	Lys	His
475		50					55					60				
477	Leu	Gln	Leu	Asn	Asp	Ala	Gly	Gln	Tyr	Val	Cys	Gln				
479	65					70					75					

481 <210> SEQ ID NO: 11
483 <211> LENGTH: 84
485 <212> TYPE: PRT
487 <213> ORGANISM: Homo sapiens
489 <220> FEATURE:
491 <221> NAME/KEY: MISC_FEATURE
493 <222> LOCATION: (6)..(51)
495 <223> OTHER INFORMATION: "Xaa" at positions 6-7, 9-16, 20, 22, 25-32, 34-35, 37-48 and 50
497 -51 can be any amino acid.
500 <220> FEATURE:
502 <221> NAME/KEY: MISC_FEATURE
504 <222> LOCATION: (53)..(53)
506 <223> OTHER INFORMATION: "Xaa" at position 53 can be Phe, Val, or Ile.
509 <220> FEATURE:
511 <221> NAME/KEY: MISC_FEATURE
513 <222> LOCATION: (54)..(76)
515 <223> OTHER INFORMATION: "Xaa" at positions 54-61, 71, and 73-76 can be any amino acid.
520 <220> FEATURE:

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/651,150B

Input Set : D:\seqlist.txt
Output Set: N:\CRF4\11082002\I651150B.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; Xaa Pos. 4,7,9,10,11,12,13,14,15,16,17,18,21,22,24,26,27,28,29,35
Seq#:11; Xaa Pos. 36,38,34,35,37,38,39,40,41,42,43,44,45,46,47,48,55,51,52
Seq#:11; Xaa Pos. 54,55,56,57,58,59,60,61,62,63,64,65,71,73,74,75,76,79,80
Seq#:11; Xaa Pos. 81
Seq#:25; Xaa Pos. 3,4,5

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/651,150B

Input Set : D:\seqlist.txt
Output Set: N:\CRF4\11082002\I651150B.raw

L:544 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:5
L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:10
L:552 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:15
L:556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:49
L:560 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:64
L:564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:85
L:864 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0